

Serial No. 10/813,966 Enzymatic Cleanser

Proposed New Claims 82 through 122

82. A non-toxic and environmentally safe cleanser for cleaning equipment and instruments which have bio-residue such as blood and other body fluids adhered thereto in a dried state, said non-toxic cleanser consisting of the following components;

water

sodium formate,

sodium tripolyphosphate;

sodium xylene sulfonate,

alkoxylated isopropanolamide,

sodium alkane sulfonate, sodium capryl mixture,

protease enzyme, and

amylase enzyme.

83. A cleanser as in claim 82 wherein said water component is from 64% to

68% by weight.

84. A cleanser as in claim 82 wherein said sodium formate component is from 1% to 2% by weight.

85. A cleanser as in claim 82 wherein said sodium tripolyphosphate component is from 4 to 6% by weight..

86. A cleanser as in claim 82 wherein said sodium xylene sulfonate component is from 9 to 11% by weight.

87. A cleanser as in claim 82 wherein said protease enzyme component is from 2 to 5% by weight.

88. A cleanser as in claim 82 wherein said amylase enzyme component is from 1 to 3% by weight.

89. A cleanser as in claim 82 also comprising calcium chloride.

90. A cleanser as in claim 89 wherein said calcium chloride components is from 0.1 to 0.3 % by weight.

91. A cleaner as in claim 82 wherein said isopropanolamide component is from 9 to 11% by weight.

92. A cleaner as in claim 82 wherein said sodium alkane sulfonate and sodium capryl mixture is from 0.5 to 1.5% by weight.

93. A cleanser as in claim 82 and including a fragrance of 0.1% by weight.
93. A cleanser as in claim 82 wherein said water component is from 50 to 58% by weight.
94. A cleanser as in claim 82 wherein said sodium tripolyphosphate is from 0.5 to 2.5% by weight.
95. A cleanser as in claim 82 and also comprising Laural Alcohol Alkoxylate.
96. A cleanser as in claim 95 wherein said Laural Alcohol Alkoxylate is from 3 to 5% by weight.
97. A cleanser as in claim 82 and including sodium borate decahydrate to improve long term enzyme stability.
98. A cleanser as in claim 82 wherein said decahydrate is from 1 to 2% by weight.
99. A cleanser as in claim 82 and also including 3 to 10% Propylene Glycol by weight.

100. A cleanser as in claim 82 and also including 0.1% of Propylparaben as a preservative.

101. A cleanser as in claim 82 and also including 0.1% Methyparaben as a preservative.

102. A method of making a non-toxic and environmentally safe cleanser for for equipment and instruments which have no bio-residue attached thereto, said method comprising

Adding and mixing the following ingredients,

water.

sodium formate,

sodium tripolyphosphate

sodium xylene sulfonate,

alkoxylated isopropanolamide,

a mixture of sodium alkane sulfonate and sodium capryl,

protease enzyme,

and amylease enzyme,

Mixing all the aforesaid ingredients until all solids are dissolved.

103. A method as in claim 102 wherein said water is from 64 to 68% by weight.
104. A method as in claim 102 wherein said sodium sulfonate is 1 to 2% by weight.
105. A method as in claim 102 wherein said sodium tripolyphosphate is present from 4 to 6% by weight.
106. A method as in claim 102 wherein said sodium xylene sulfonate is from 9 to 11% by weight.
107. A method as in claim 102 wherein said protease enzyme is from 3 to 5% by weight.
108. A method as in claim 102 wherein said amylase enzyme is from 1 to 3% by weight.
109. A method as in claim 102 wherein said cleanser also includes calcium chloride from 0.1 to 0.3% weight.
110. A method as in claim 102 wherein said sodium alkane sulfonate and

sodium capryl mixture and isopropanolamide are first combined and then added to the previously mixed ingredients.

111. A method as in claim 110 wherein said isopropanolamide is present from 9 to 11% by weight and said mixture is present from 0.5 to 1.5% by weight.

112. A method as in claim 102 and including a fragrance .

113. A method of cleaning instruments and equipment which have a bio residue thereon, said method comprising

immersing in and/or applying a non-toxic and environmentally safe composition consisting of the following components to said instruments and equipment,

water

sodium formate

sodium tripolyphosphate

sodium xylene sulfonate,

aldoxylated isopropanolamide

a mixture of sodium alkane sulfonate and sodium capryl

protease enzyme, and

amylase enzyme.

rinsing said equipment and instruments after cleaning.

114. A method as in claim 113 wherein said composition also includes calcium chloride.

115. A method as in claim 113 wherein said water is from 64 to 68% by weight.

116. A method as in claim 113 wherein said sodium formate is from 1 to 2% by weight.

117. A method as in claim 113 wherein sodium xylene sulfonate is from 9 to 11% by weight.

118. A method as in claim 113 wherein said protease enzyme is from 3 to 5% by weight.

119. A method as in claim 113 wherein said amylase enzyme is from 1 to 3% by weight.

120. A method as in claim 113 wherein said alkoxylated isopropanolamide is from 9 to 11% by weight and said sodium alkane sulfonate is from 0.5 to 1.5% by

weight.

121. A method as in claim 113 wherein said tripolyphosphate is from 4 to 6% by weight.

122. A method as in claim 113 also including a fragrance.